

# Interval (Single Pulse On Operate) TDUI Digi-Set Timing Module



10 YEAR WARRANTY

Obsolete Specification  
Redesigned product is available  
see new specifications at:  
[www.ssac.com/standard/standard.htm](http://www.ssac.com/standard/standard.htm)

- Switch
- Over
- +/-0
- No Fl
- Two Mo
- One Mod

## Description

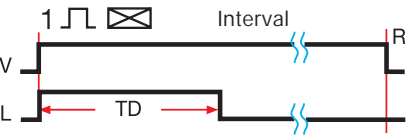
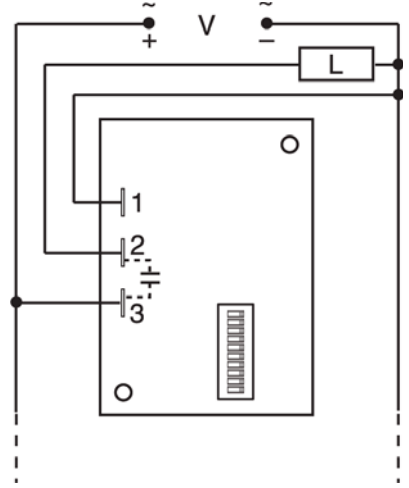
The TDUI Series combines digital timing circuitry with universal voltage operation. 24 to 240 V AC and 12 to 24 V DC are available in three ranges. The TDUI Series offers DIP switch selectable time delays ranging from 100 ms to 10,230 s in three ranges. Its 1 A rated output, its ability to operate on multiple voltages, and its wide range of switch selectable time delays make the TDUI Series an excellent choice for process control systems and OEM equipment.

## Operation

Upon application of input voltage, the time delay begins. The output is energized during the time delay. At the end of the time delay, the output is de-energized and remains de-energized until input voltage is removed.

**Reset:** Removing input voltage resets the time delay and the output.

Approvals:

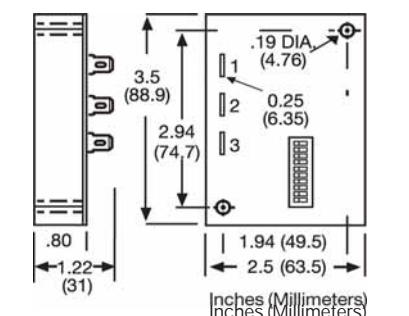
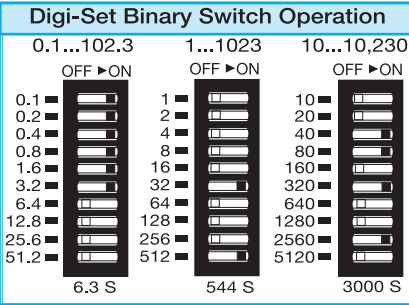


V = Voltage L = Load TD = Time Delay  
R = Reset — = Undefined time

| Input Voltage Range | Time Range - Seconds | Part Number |
|---------------------|----------------------|-------------|
| 24 ... 120 V AC     | 0.1 ... 102.3        | TDUIL3000A  |
| 100 ... 240 V AC    | 0.1 ... 102.3        | TDUIL3001A  |
| 12 ... 24 V DC      | 0.1 ... 102.3        | TDUIL3002A  |
| 24 ... 120 V AC     | 1 ... 1023           | TDUI3000A   |
| 100 ... 240 V AC    | 1 ... 1023           | TDUI3001A   |
| 12 ... 24 V DC      | 1 ... 1023           | TDUI3002A   |
| 24 ... 120 V AC     | 10 ... 10230         | TDUIH3000A  |
| 100 ... 240 V AC    | 10 ... 10230         | TDUIH3001A  |
| 12 ... 24 V DC      | 10 ... 10230         | TDUIH3002A  |

## Technical Data

| Time Delay                           |   |
|--------------------------------------|---|
| Type                                 | Digital integrated circuitry  |
| Range*                               | 0.1 ... 102.3 s in 0.1 s increments<br>1 ... 1023 s in 1 s increments<br>10 ... 10,230 s in 10 s increments |
| Repeat Accuracy                      | +/-0.5%   |
| Tolerance (Factory Calibration)      | +/-10%  |
| Reset Time                           | 150 ms  |
| Recycle Time                         | 150 ms  |
| Time Delay vs. Temperature & Voltage | +/-5%   |
| Input                                |   |
| Voltage                              | 24 ... 240 V AC, 12 ... 24 V DC +/-20%  |
| Line Frequency                       | 50 ... 60 Hz  |
| DC Ripple                            | 10%   |
| Output                               |   |
| Type                                 | Solid state   |
| Form                                 | Normally Open, closed during timing   |
| Rating                               | 1 A steady state, 10 A inrush at 60°C   |
| Voltage Drop                         | ≅ 2.5 V at 1 A  |
| Leakage                              | ≤ 5 mA  |
| Protection                           |   |
| Circuitry                            | Encapsulated  |
| Dielectric Breakdown                 | ≥ 2000 V RMS terminals to mounting surface  |
| Insulation Resistance                | ≥ 100 MΩ  |
| Mechanical                           |   |
| Mounting                             | Surface mount with two #8 (M4 x 0.7) screws   |
| Package                              | 3.5 x 2.5 x 1.2 in. (88.9 x 63.5 x 31 mm)   |
| Termination                          | 0.25 in. (6.35 mm) male quick connect terminals   |
| Environmental                        |   |
| Operating Temperature                | -40°C ... +80°C   |
| Storage Temperature                  | -40°C ... +85°C   |
| Humidity                             | 95% relative, non-condensing  |
| Weight                               | ≅ 4.8 oz (136.1 g)  |



## Accessories

- Female quick connect  
P/Ns:  
P1015-13 (AWG 10/12)  
P1015-64 (AWG 14/16)  
P1015-14 (AWG 18/22)
- Quick connect to screw adaptor  
P/N: P1015-18

\*For CE approved applications, power must be removed from the unit when a switch position is changed.

See accessory pages at the end of this section.